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NATIONAL BOUNDARIES IN THE ARCTIC OCEAN

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NATIONAL BOUNDARIES IN THE ARCTIC OCEAN

Any atlas of the North Pole, showing the land, sea and permanent ice within the Arctic Circle (60° North) will confound efforts of international law experts to compare the South Pole, a huge frozen continent surrounded by ice and ocean entirely filling the area of the Antarctic Circle (60° South). The differences are so striking in physical geography that it is not surprising that similar disparities between the Polar Regions exist in population, natural resources, transportation and strategic importance.[1] In both north and south, there are sovereignty problems but the Antarctic Treaty that grew out of the International Geophysical Year (1957-1958) froze all claims for at least thirty (30) years.

In the polar regions, the convergence of North-South longitudinal lines at the pole needs to be considered in drawing boundaries between contiguous nations, whose territory faces the polar oceans. This problem is much more important in the Arctic Ocean than in Antarctica for two reasons. First of all, as we observe the globe there are a number of nation states surrounding the North Pole, whereas there are none that are near enough to Antarctica to be able to make maritime claims there. In fact, only the Republic of South Africa, Australia and New Zealand, Chile and Argentina have significant land masses in the Southern Hemisphere/ Oceans. The only lateral boundary dispute relevant to this paper is the dispute between Chile and Argentina, commonly known as the Beagle Channel Controversy and the extension of claims. The other significant difference between the North and South Poles is the land mass of Antarctica and the extension of its territorial waters and economic zone as compared to the absence of land at the North Pole together with the proximity of the adjacent land masses.

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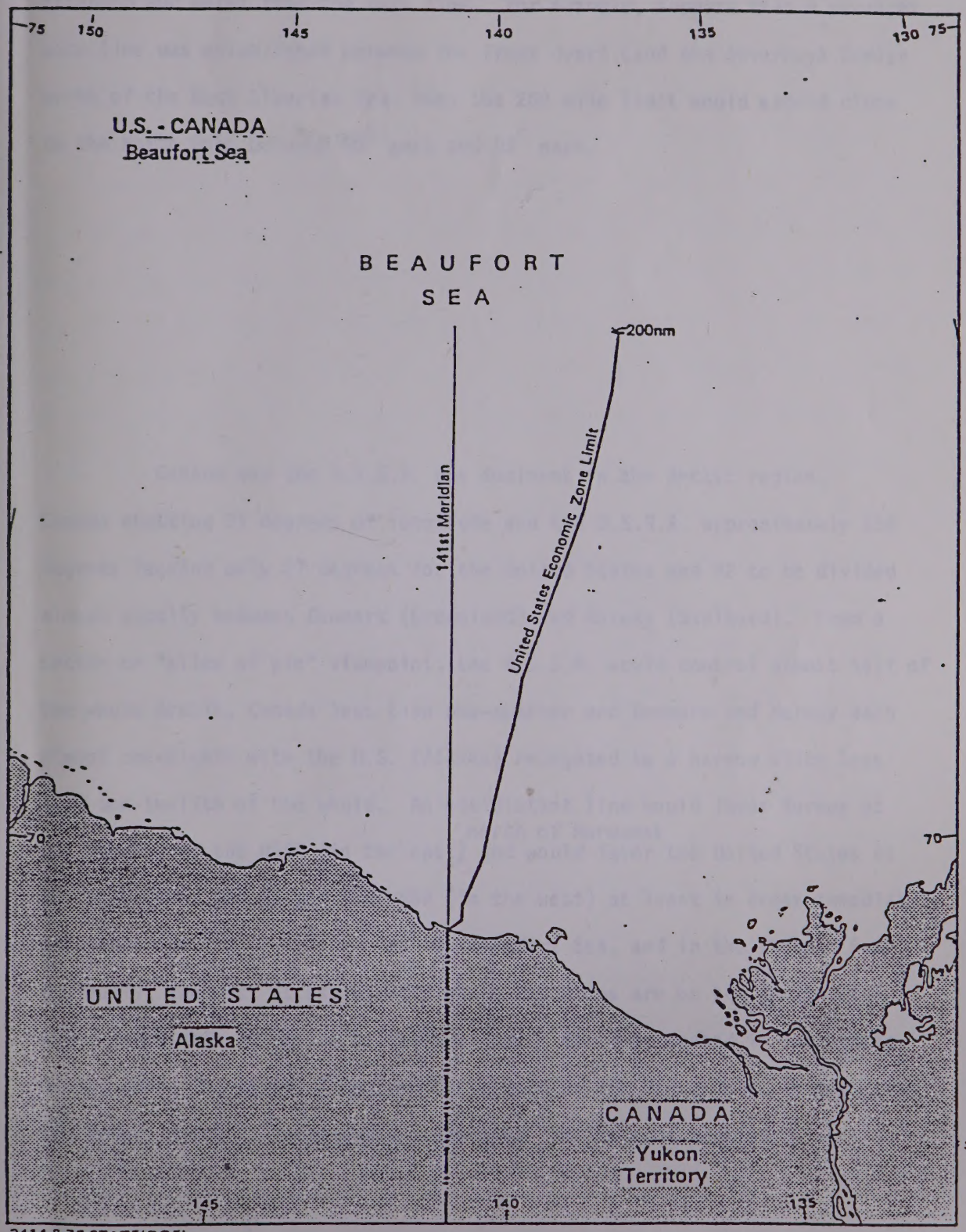
The territorial claims in Antarctica involve "a variety of justifications"yet all, except Norway, accept the "sector principle" that the land and waters surrounding the South Pole should be under the sovereignty of the claimant nations in sectors measured from the Antarctic Circle to the South Pole, like slices of a pie. Although 3 of these claims are overlapping and the two superpowers, the U.S. and the U.S.S.R., make no claims to territory, all nations are cooperating in the exploration and scientific investigations under the Treaty. Thus far no other principle has been invoked to justify the claims, not even the Atlantic-Pacific Principle that controlled Argentina and Chile in Tierra del Fuego until the settling of Beagle Channel Islands controversy. Does the sector principle have a legal basis or particular relation to Antarctic reality? Is there more reason to apply the sector principle to the Arctic where nations abut the areas claimed? If the sector principle is unacceptable in the North, the position of Norway and the United States, what principle should govern the demarcation of marine lateral boundaries from the shores of the Arctic Ocean to the North Pole? This paper attempts to answer the latter questions, especially in the light of the difference between the equidistant line and the sector line in certain disputed offshore areas of the Arctic.

If we take up the extension of boundaries of those nation states bordering on the Arctic Ocean, we need only consider the Soviet Union and Canada as principal contenders with Norway (Svalbard), Greenland (Denmark) and Alaska (USA) as also running. The most difficult issues in the demarcation of marine lateral boundaries in the Arctic Ocean involve Canada and Greenland, Norway and the Soviet Union in the vicinity of Franz Josef Land and the United States and the Soviet Union north of the Bering Strait.

The easiest line would seem to be the extension of the boundary between Alaska and the Yukon (Canada) since it runs along longitude 141° West. Nevertheless, all of the lateral marine boundaries in the Arctic Ocean will be affected by principles of equidistance which may skewer the boundary at least near the coast. For example, an equidistance line between Prudhoe Bay and MacKenzie Delta would run Northeast rather than directly North. (Map 1)

There will, obviously, be a significant difference between the boundaries in the waters of the Arctic Ocean where the land mass is less than 200 miles from the Pole, as compared to those areas where it is clearly more than 200 miles. Thus, the High Seas areas of the Arctic Ocean are located considerably to the south of the North Pole on both sides of the International Date Line just north of the East Siberian Sea and the Beaufort Sea. Many factors must be considered in the process of establishing the lateral boundaries between States out to the 200 mile limit. For example, the depth of the continental shelf and the extent to which claims to the resources thereof could be made beyond the 200 mile zone raise problems of the boundary between national jurisdictions over the prolongation of the land mass. Another factor would be the existence of historical rights based on fishing the waters of the Arctic Ocean which might fall within the 200 mile limit. In this regard it might be useful to distinguish between ground fish and pelagic or anadromous species. Of course distant fishing fleets may have established rights based on treaty provisions involving the Arctic Ocean. The final fact that will determine the location of marine lateral boundaries is the possibility of straight base lines being drawn between islands, especially those of Canada and the Soviet Union which would be the basis for a claim that their sovereignty or jurisdiction

MAP 1



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extended 200 miles from the base line. For example, suppose that a straight base line was established between the Franz Josef Land and Severnaya Zemlya north of the West Siberian Sea, then the 200 mile limit would extend close to the North Pole between 60^{o} east and 95^{o} east.

Canada and the U.S.S.R. are dominant in the Arctic region, Canada abutting 81 degrees of longitude and the U.S.S.R. approximately 159 degrees leaving only 27 degrees for the United States and 92 to be divided almost equally between Denmark (Greenland) and Norway (Svalbard). From a sector or "slice of pie" viewpoint, the U.S.S.R. would control almost half of the whole Arctic, Canada less than one-quarter and Denmark and Norway each almost one-eighth with the U.S. (Alaska) relegated to a narrow slice less than one-twelfth of the whole. An equidistant line would favor Norway at the expense of the USSR (in the east) north of Murmansk and would favor the United States at the expense of Canada and the USSR (in the west) at least in areas immediately off shore in the Beaufort Sea, and in the Chukchi Sea. Obviously, the most accessible off shore resources are on the continental shelf and within 200 miles of the baseline. The deep seabed in the Arctic Ocean, where the sector lines are converging on the North Pole, is more than ~~500~~ 250 meters depth, a permanently icecovered "heritage of mankind."

The majority of the deep seabed would not fall under national jurisdiction since very little of the floor of the sea could be considered as a natural prolongation of land mass at depths in excess of 2,000 meters. The only area where the Continental Shelf could extend well beyond the 200 miles falls in the Chukchi Sea and East Siberian Sea, almost all of which is under the jurisdiction of the Soviet Union. But in no case would the Soviet Union or the United States be able to claim any jurisdiction further north, especially in the area of the Arctic Ocean known as the Laurentian Basin. The only reported offshore exploration for oil and gas that might lead to controversy is north of the MacKenzie Delta in Canada less than 100 miles from the U.S. border which is on the 141 degree longitude. The other major oil and gas reserves of Canada are offshore the islands near Greenland. The oil field at Bent Horn could be developed by using ice breaker/tankers to the South, whereas the MacKenzie Delta gas will probably flow through the Prudhoe Bay-Valdez, Alaska pipeline. The commercial feasibility of offshore fields development will be complicated by ice scouring and flow of pack ice. Well-heads would have to be countersunk in the seafloor and protected by silos.[2]

The most recent source on Arctic offshore oil and gas structures and drilling systems suggests that many technical difficulties have been overcome and that operators are serious about exploring the promising Beaufort Sea acreage. The concrete island drilling system which is drilling off the north coast of Alaska is new technology awaiting a big discovery. The delivery of two Mobile Arctic Caissons from Japan to set down in the Beaufort Sea in August, 1984 represented the largest ocean tow for an offshore structure of its size.[3]

More intense offshore activity has been postponed by the end of the world oil crisis and the lower oil prices. However, the areas of greatest interest in Canadian offshore plans are likely to center on the high Arctic and the Beaufort Sea. In an earlier comment in a Canadian law review, the authors paralyzed the rights which Canada could exercise over the continental margin under international law and concluded that the median line or equidistant principle under Article 6 of the Continental Shelf Convention of 1958 (UN Doc. A.CONF. 13L55 26 Apr 1958) would govern except in the case of special circumstances as found in the North Sea Continental Shelf Cases (1969 ICJ3). Applying their conclusions to the six boundary questions which Canada then faced, of which two were the west and east boundaries of Canada in the Arctic Ocean, the authors reject the North Sea Approach and restate the sector principle using the meridian lines of 141° W and 60° W as the appropriate historical marine boundary.[4] Assuming that the sector principle is still a tenable position, Canada has established pollution control over an offshore area bounded on the west by the 141 st meridian of longitude.[5]

The line which the Canadian government has recognized as the eastern boundary running along the 60th meridian from the North Pole defines the point where it enters the channel down to Baffin Bay. The 60th meridian does not serve as a land boundary and runs closer to Ellesmere (Canada) than to Greenland (Denmark); it does not conform to the equidistant principle.

The dispute between Denmark and Canada regarding the continental shelf in Davis Strait and Baffin Bay was settled by the Treaty of 1973[6] which terminates at the 82 degree 13 minute parallel, approximately equidistant between Greenland and Ellesmere Island off the Canadian town of Alert located on the shore of Ellesmere at 82° 31 N and 62° 05 W. From the termination of the Treaty line to the North Pole, only some 470 nautical miles, the equidistant line would bulge eastward of the 60° line for the first 200 miles and

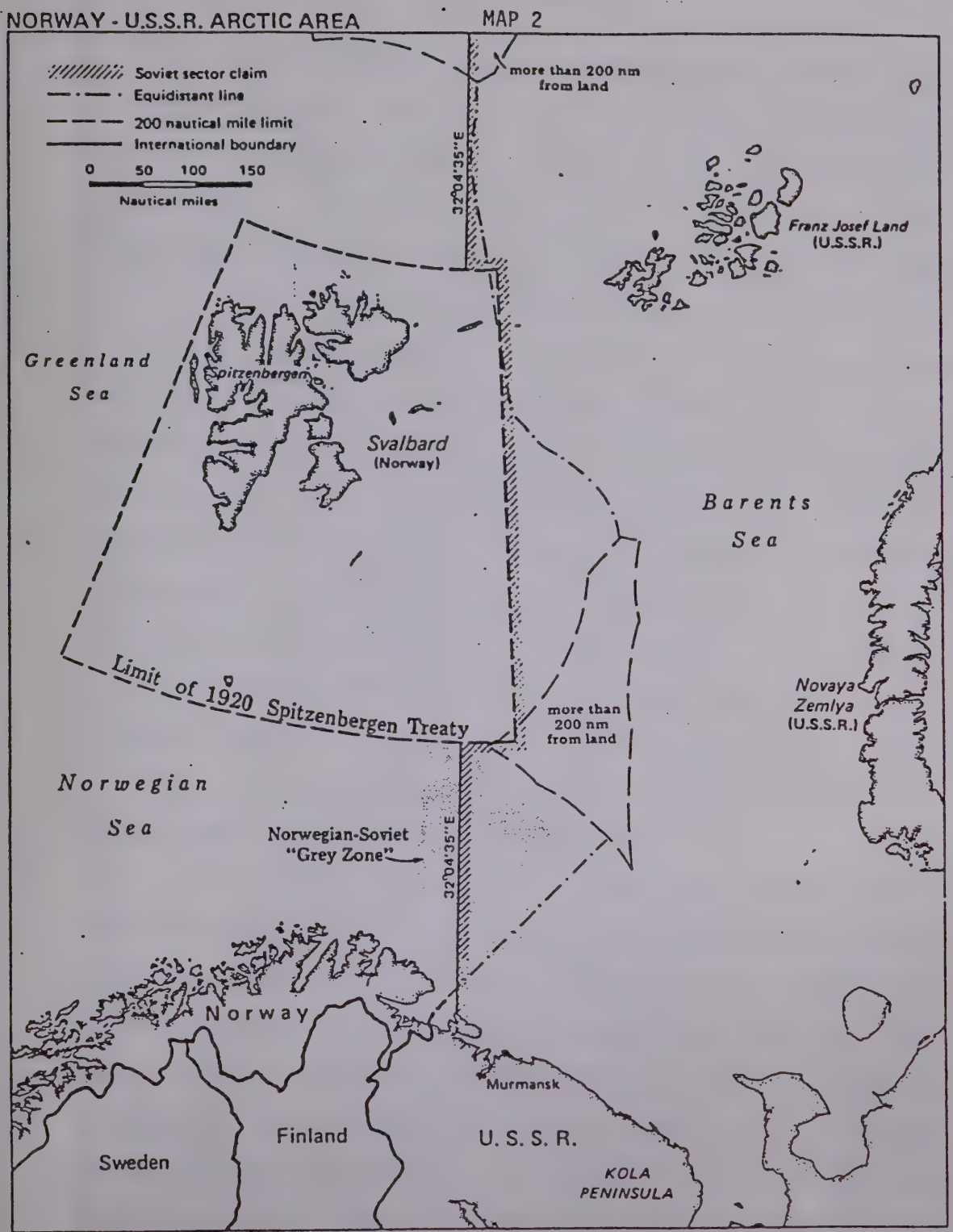
then west of it to the Pole. Since all depths from the termination of the Treaty line exceed 2,000 meters and the sea is permanently frozen over, there is little likelihood that the offshore lateral boundary will be of any practical importance. Under these "special circumstances" it would seem most sensible to use the sector line as the boundary north from the point where the treaty line terminates.[7]

When we examine the seabed north of Norway in the disputed area between Svalbard and Franz Josef Land in the Barents Sea, all depths are less than 500 meters and often closer to 200-350 meters especially in the disputed area. Most of the area south of the Svalbard-Franz Josef Land, approximately 80^{o} N. is open water. There are annual catches of Cod, Haddock and Capelin totalling up to 2 million metric tons in 1975 in the Barents Sea almost equally divided between the USSR and Norway. Although there is no offshore oil and gas production, surveys are being conducted on the Barents Sea continental shelf because oil deposits in the Pechora Basin are believed to extend offshore.

There are other resources that must be considered, in addition to minerals and fisheries. Geologists experimenting on the seabed have recorded polymetallic sulfides bubbling up through faults and being deposited on the ocean floor. This product of the earth's "juvenile crust" may prove more valuable than the deep seabed manganese nodules which have finally been placed under the jurisdiction of the International Seabed Authority set up by the UN Law of the Sea Treaty. Access to deep sea and continental shelf resources may be adversely affected by the disputes between Norway and the Soviet Union as to the status of navigation on the high seas of the Arctic especially if the Soviets maintain that all waters within their "sector" are closed.

Given the advent of the 200 mile fishing zone, all Arctic fishing grounds are now under some form of national management. Capelin is the major pelagic fish in the Atlantic side of the Arctic Ocean since Herring stocks in the Barents Sea fell off drastically between 1967 and 1970 due to overfishing but the Arctic Capelin is especially vulnerable to overfishing. Thus it becomes vital to control the size of catches in each jurisdiction and to settle any disputes which might result in overlapping rights. Assuming that the Spitzenbergen Treaty of 1920 gives access to maritime operations to all 39 other signatories within the land areas of Svalbard and the surrounding territorial sea, Norway interprets the Treaty as limiting universal exploitation to such area, giving Norway exclusive rights over continental shelf resources beyond the territorial sea (4 miles). Outside the Spitzenbergen Treaty Limits, there is a large area of the shelf claimed by both Norway and the USSR. Norway bases its claim on the equidistant principle and the USSR on the sector line straight from the land boundary with Norway to the Pole (32^{o} 04' 35" E meridian). Another factor in favor of Norway's extended claim is the 1977 extension of a 200 mile fishing zone into the Barents Sea which extends over most of the disputed area between Svalbard and Novaya Zemlya Islands.

Unless one or the other states exercise control over fishing rights in the disputed area especially in the section where the shelf is beyond the 200 mile limit of either nation, distant-water fishing fleets will rapidly deplete the stocks off these shores. The attached map indicates the location of the various lines in the simplest form. (Map 2)

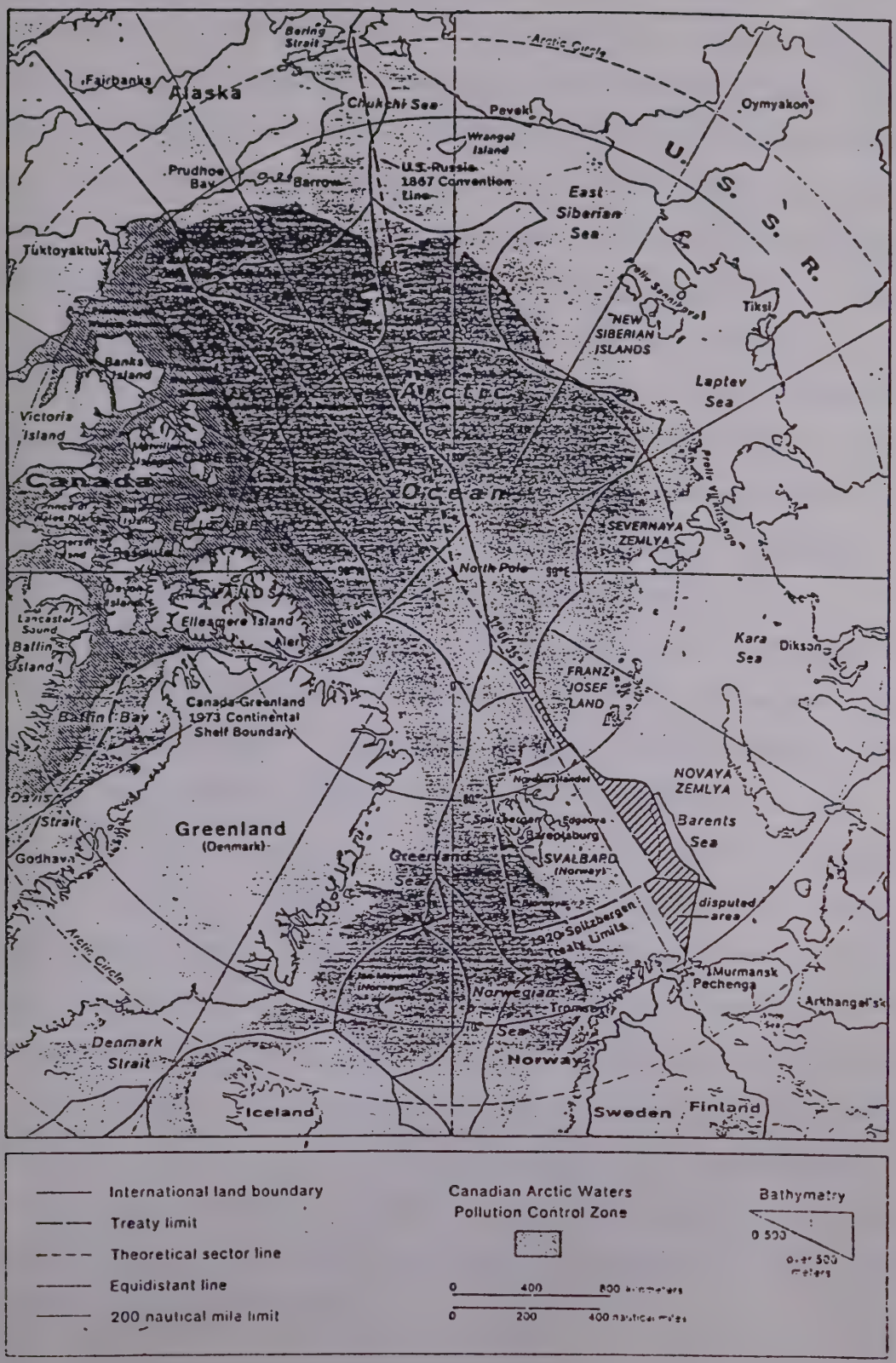

NORWAY - U.S.S.R. ARCTIC AREA
MAP 2
Soviet sector claim
Equidistant line
200 nautical mile limit
International boundary
0 50 100 150
Nautical miles
more than 200 nm from land
32°04'35"E
Franz Josef Land (U.S.S.R.)
Greenland Sea
Spitzenbergen
Svalbard (Norway)
Barents Sea
Limit of 1920 Spitzenbergen Treaty
more than 200 nm from land
Novaya Zemlya (U.S.S.R.)
Norwegian Sea
Norwegian-Soviet "Grey Zone"
32°04'35"E
Norway
Murmansk
Finland
U. S. S. R.
Sweden
KOLA PENINSULA

The sector principle of polar sovereignty probably originated with the British claim to a sector of Antarctica in 1917 and 1923 declarations but the Russian Decree of April 15, 1926 was its first application to the Arctic region. Taracourio in his historical work on the Soviets in the Arctic refers to Smedal's seminal study of polar sovereignty for a definition of polar sector.[9] He quotes the Russian scholar, Lakhtin, as visualizing a "triangular region of terrestrial gravitation formed by a state subjacent to the Arctic and limited by the coast line and the meridians crossing the western and eastern extremities of this line."[10] Taracouzio then goes on to analyze the juristic, pragmatic and historical arguments for the sector, he concludes that the Soviets have jeopardized principles of international law by advancing the sector theory thus rendering "international action urgent, if collision between nations on legal grounds is to be averted."[11]

In his study for Yale ten years later, Jones cites his Harvard colleague, Taracouzio on the subject of "sector claims" which he discusses as a minor problem in one paragraph before turning his attention to the military aspects of the Northern High Latitudes.[12]

Finally there is a minor area of dispute between Norway and Denmark because Jan Mayen Island is less than 400 miles from Greenland, but Denmark's Ordinance Regarding the Fishery Zone off Greenland of 1980 stated that its jurisdiction will not be exercised beyond the line which is everywhere equidistant. The boundary between Greenland and Svalbard is not yet delineated. On the assumption that this line between Jan Mayen and Greenland should be within 200 miles of the Norwegian island in a circular line, there is a point X as indicated on the attached Map No. 3 which could serve as the end of a sector line between Denamark and Norway along 8^{o} W.

MAP 3


Bering Strait
Arctic Circle
Fairbanks
Alaska
Chukchi Sea
Pevek
Oymyakon
Wrangel Island
Prudhoe Bay
Barrow
U.S.-Russia 1867 Convention Line
East Siberian Sea
U. S. S. R.
Tuktoyaktuk
New Siberian Islands
Tiksi
Banks Island
Laptev Sea
Victoria Island
Canada
Arctic Ocean
Severnaya Zemlya
North Pole
Lancaster Sound
Ellesmere Island
Alert
Kara Sea
Dikson
Ballin Island
Franz Josef Land
Canada-Greenland 1973 Continental Shelf Boundary
Baffin Bay
Novaya Zemlya
Davis Strait
Greenland (Denmark)
Barents Sea
Godhavn
Greenland Sea
Svalbard (Norway)
disputed area
1920 Spitzbergen Treaty Limits
Murmansk
Pechenga
Arkhangel'sk
Arctic Circle
Norwegian Sea
Tromsø
Denmark Strait
Norway
Iceland
Sweden
Finland
International land boundary
Treaty limit
Theoretical sector line
Equidistant line
200 nautical mile limit
Canadian Arctic Waters Pollution Control Zone
Bathymetry
0 500
over 500 meters
0 400 800 kilometers
0 200 400 nautical miles

A recent pamphlet in the significant issues series of Georgetown's Center for Strategic and International Studies[12] does not reflect the work done in 1983 which is so well reported by Shusterich at the end of his article.[13] For example, beginning with the March, 1983 Sessions on Arctic Technology and Policy at MIT, he cites the Third National Workshop on People, Resources and the Environment north of 60 degrees at Yellowknife, Canada, in June 1983 and finally the INUIT Circumpolar Conference at the end of July, 1983. From all of these recent activities, he concludes that a regional approach is necessary and that successful bilateral arrangements may indicate that a more multilateral approach to the region could be possible. Although Article 123 of the UN Law of the Sea Convention calls on states that border an enclosed or semi-enclosed seas to cooperate with each other, in the exercise of their rights and duties, either directly or through an appropriate regional organization.

The potential for a regional Arctic organization, consisting of the five nations abutting the sea is impressive. All five are developed, four are already working together in the broader OECD and in NATO, balancing the USSR both in circumference of polar sovereignty and in resources. The needs for cooperative efforts in controlling overfishing and pollution are obvious, not to mention the marine boundary dispute settlement possibilities of such a regional organization. Undersea, sea, ice and air transportation will have to be worked out especially in the so-called high seas of the Arctic. The common heritage of mankind, the deep seabed resources can best be explored by the Arctic powers which are advanced in under-ice technology. The international Seabed Authority should welcome an opportunity to delegate such a risky and expensive undertaking to an Arctic organization. In comparison with existing regional organizations which have been successful, the Arctic effort could be especially fruitful.

FOOTNOTES

[1] For a recent comparison of these and other factors, see U.S. Central Intelligence Agency, Polar Regions: Atlas (May 1978).

[2] CIA Report, op.cit., no. 1, pp. 24-25.

[3] See Arctic Report in Offshore, Int. Journal of Ocean Business, February 1985, pp. 41-52.

[4] Beauchamp, Crommelin & Thompson, "Jurisdictional Problems in Canada's Offshore," 11 Alberta L. Rev. 431 (1973), at pp. 442-443. See Canadian Chart No. 7000 titled Arctic Archipelago (March 1982).

[5] See MacDonald, The Arctic Frontier, 215 (1966) RSC 1970 C. 2 and Stewart & Dickie, Ad Mare: Canada Looks to the Sea, 87 (1971) cited in the above article.

[6] Canada-Denmark Treaty of 1973 came into force with exchange of ratifications on March 13, 1974.

[7] U.S.Dept. of State, Limits in the Seas, No. 72, "Continental Shelf Boundary Canada-Greenland," August 4, 1976. An unpublished paper by Robert W. Smith entitled, "National Claims and the Geography of the Arctic," prepared for the LOS Institute Conference of Sept. 26, 1984 suggested that the fact that the Treaty boundary stops at 82° 13' N lattitude is "probably indicative of their lack of confidence regarding information on coast lines ..."

[8] Taracouzio, Soviets in the Arctic, N.Y. 1938, and Smedal, Acquisition of Sovereignty over Polar Areas, Oslo, 1931 (translated into French and published in Paris in 1932).

[9] Taracouzio, op.cit., p. 321.

[10] Id., p. 366.

[11] Jones, S. B., The Arctic: Problems of Possibilities, Yale Institute of International Studies, December 1948, p. 19. This footnote on page 24 on the production of oil in the MacKenzie Valley during World War II is illuminating.

[12] Rey, L., "The Challenging and Elusive Arctic Region," Vol. IV, Number 5, of Significant Issues Series CSIS, Wash., DC (1984).

[13] Shusterich, K.M., "International Jurisdictional Issues in the Arctic Ocean," 14 Ocean Development & Int. Law (1984), pp. 235-272, especially footnotes 48-55. See also Bloomfield, L.P., "The Arctic: Last Unmanaged Frontier," 60 For. Affairs (Fall 1981) 87, and Olenicoff, S.M., "Territorial Waters in the Arctic: The Soviet Position," Rand Corp. R-907 ARPA July 1972. Both emphasize the military significance of the Arctic.

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